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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,220	12/29/2000	Joshua Coates	SCAL.P0009	9346

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CHRISTOPHER K. GAGNE
C/O BLAKLEY, SOKOLOFF, TAYLOR & ZAFMAN LLP
12400 WILSHIRE BOULEVARD, SEVENTH FLOOR
LOS ANGELES, CA 90025

EXAMINER

ELLIS, KEVIN L

ART UNIT	PAPER NUMBER
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2188

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/753,220

Applicant(s)

COATES ET AL.

Examiner

Kevin L. Ellis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

1. Claims 13-31 are presented for examination. New claims 29-31 have been added by amendment. This Office Action is in response to the amendment filed 12/1/05.

Claim Rejections – 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 13-31 are rejected under 35 U.S.C. § 102(e) as being anticipated by Cohen et al., U.S. Patent 6,389,462.

A) As to claims 13 and 29, Cohen et al. discloses the invention as claimed. Cohen et al. teaches system where when an object is requested a control node is selected to retrieve that object from a storage node and store the object in the control node. In response to subsequent requests for the object a different control node may be selected, the number of control nodes storing a respective copy dependent on the number of requests for the object (see Fig 1, Col 6 Line 21 to Col 7 Line 48). Cohen teaches that when a client requests an object the request is sent through a proxy redirector. The proxy redirector sends that request to various proxy caches ("control node") to fulfill the request. If the

proxy cache does not contain the object then the proxy cache requests the object from the origin server ("storage node"). The object is then cached in the proxy cache. The proxy cache selected to cache the object is not fixed, but can be based upon such parameters as least-loaded, round-robin, arbitrary, or random (see Col 7 Lines 43-45 and Col 15 Lines 14-16).

- B) As to claims 14, 15, and 30, the selecting is performed by a level 4 switch (see Col 6 Lines 26-27) that performs load balancing (see Col 7 Lines 43-45 and Col 15 Lines 14-16).
- C) As to claims 16 and 31, the proxy caches (see Fig 1 Ref 115, 110-1, 110-2, and 117) can be called "distributed object storage managers" since they are distributed across a network and manage the storage of the cached objects.
- D) As to claim 17, a switch does perform the selecting and is capable of prioritizing the protocol traffic (see Col 6 Line 21 to Col 7 Line 48).
- E) As to claim 18, the selecting of the various control nodes can be based upon availability (see Col 7 Lines 43-45 and Col 15 Lines 14-16).
- F) As to claims 19 and 20, the limitations have been addressed with respect to claims 13, 14, and 18 above and are rejected here similarly.
- G) As to claims 21-28, the limitations have been addressed with respect to claims 13-20 above and are rejected here similarly.

Response to Arguments

4. Applicant's arguments filed 12/1/05 have been fully considered but they are not persuasive.
5. Applicant argues that Cohen et al. selects a specific proxy cache for a specific origin server and that there is no suggestion of storing another copy of the file in another proxy cache (see P 6 and 7 of the response). Cohen et al. only teaches having a specific proxy cache assigned to a specific origin server as one embodiment. Cohen et al. states:

Proxy redirector 104 selects one of the available proxy caches to which to forward client requests based on a metric such as least-loaded or round-robin, based on IP header information such as the origin server IP address. *With respect to the latter, all objects from a specific origin server will be served by a specific proxy.* (Col 7 Lines 43-48, emphasis added)

Cohen et al. sets forth three ways to select the proxy cache. These three ways are either least-loaded, round-robin, or based upon IP address. Obviously one could not select a proxy cache based upon least-loaded and IP address or round-robin and IP address. These are exclusive of each other. Cohen et al. emphasises this again at Col 15 Lines 13-16, "At step 302, proxy redirector selects a proxy cache based on a load balancing algorithm or on an arbitrary or random selection." Cohen et al. is thus not limited to selecting a specific proxy cache or a specific origin server. By selecting a proxy cache based upon a load balancing algorithm the system can select a different proxy cache and store the file in another proxy cache.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin L. Ellis whose telephone number is 571-272-4205. The examiner can normally be reached on weekdays from 6:00AM-2:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Kevin L. Ellis
Primary Examiner
December 20, 2005

Kevin L. Ellis